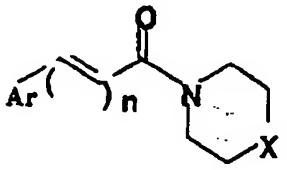
**AMENDMENTS TO THE CLAIMS**

Please amend claims 1 and 2 as indicated below. Please cancel claim 20, without prejudice or disclaimer of the subject matter therein. Please add new claim 21 as indicated below.

1. (Currently amended) An arylalkenoic acid heterocyclic amide compound of general formula (I),

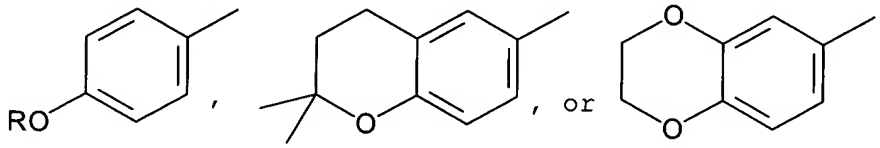


1

wherein n = 1 or 2,

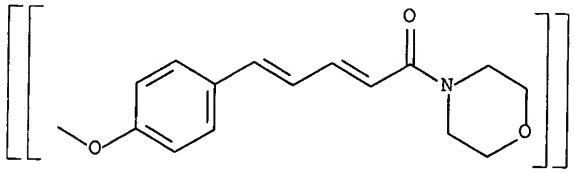
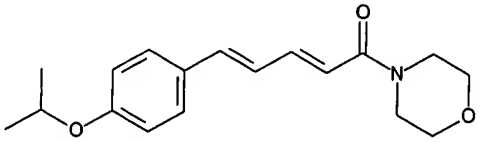
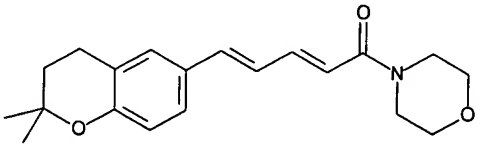
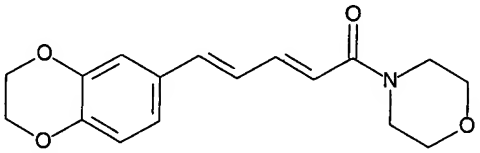
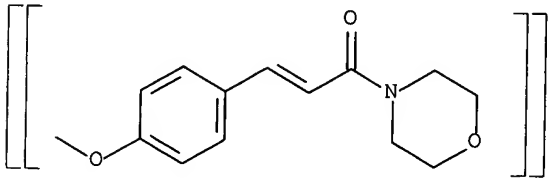
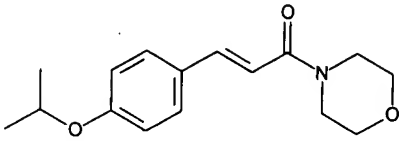
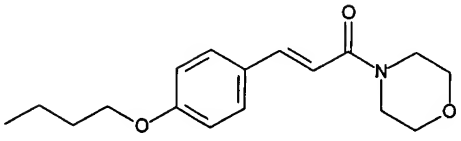
X = O or N-$CH_3$, and

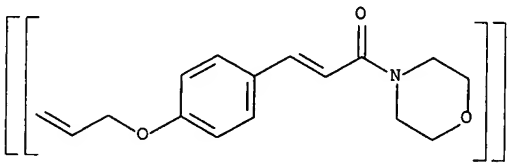
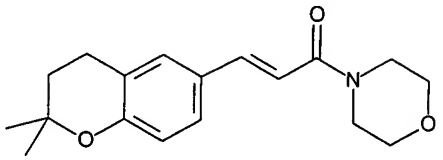
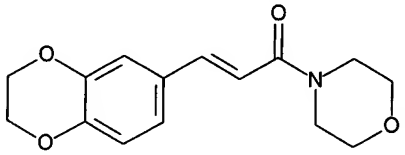
Ar=



wherein R = linear or branched $C_2$ to $C_5$ alkyl chain ~~, or 2-propenyl~~.

2. (Currently amended) An arylalkenoic acid heterocyclic amide compound as claimed in claim 1 wherein the compound is selected from the group consisting of:

| S.No | Structure | M.F. | M.P.°C | Pungency index |
|---|---|---|---|---|
| [[i]] |  | [[$C_{16}H_{19}NO_3$]] | [[133]] | [[$10^6$]] |
| ii |  | $C_{18}H_{23}NO_3$ | 134 | $10^1$ |
| iii |  | $C_{20}H_{25}NO_3$ | 171 | $10^4$ |
| iv |  | $C_{17}H_{19}NO_4$ | 137 | $10^4$ |
| [[v]] |  | [[$C_{14}H_{17}NO_3$ ]] | [[95]] | [[$10^5$]] |
| vi |  | $C_{16}H_{21}NO_3$ | 98 | $10^6$ |
| vii |  | $C_{18}H_{23}NO_3$ | 117 | $10^7$ |

| | | | | |
|---|---|---|---|---|
| [[viii]] |  | [[$C_{17}H_{23}NO_3$ ]] | [[70]] | [[$10^4$]] |
| ix |  | $C_{16}H_{19}NO_3$ | 88 | $10^6$ |
| x |  | $C_{15}H_{17}NO_4$ | 139 | $10^4$ |

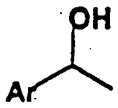
| Compound No. | Compound Name |
|---|---|
| ~~i)~~ | ~~5- (4 -methoxy phenyl) - 2E, 4E-pentadienoic acid morpholine amide~~ |
| ii) | 5- (4 - isopropyloxy phenyl) - 2E, 4E-pentadienoic acid morpholine amide |
| iii) | 5- (2H)-2,2-dimethyl-3,4-dihydro-benzopyran-6y1-2E, 4E-pentadienoic acid morpholine amide |
| iv) | 5- (3,4 -ethylenedioxy phenyl) - 2E, 4E-pentadienoic acid morpholine amide |
| ~~v)~~ | ~~3-(4 -methoxy phenyl)-2E-propenoic acid morpholine amide~~ |
| vi) | 5- [[3-]] (4 -isopropyloxy phenyl)-2E- propenoic acid morpholine amide |
| vii) | 5- [[3-]] (4 -butyloxy phenyl)-2E- propenoic acid morpholine amide |
| ~~viii)~~ | ~~3-(4 -allyloxy phenyl)-2E- propenoic acid morpholine amide~~ |
| ix) | 3-[(2H)-2,2-dimethyl-3,4-dihydro-benzopyran-6y1]-2E-propenoic acid morpholine amide |
| x) | 3 - (3,4 -ethylenedioxy phenyl) - 2E-propenoic acid morpholine amide |

3. (Withdrawn) A method for flavoring food, comprising the use of a compound of Formula 1 as thermogenic, pungent, spicy agents, or food additives.

4-6. (Canceled).

7. (Withdrawn) A process for the preparation of aryl alkenoic acid heterocyclic amides as claimed in claim 1, the said process comprising steps of:

(a) reacting aldehyde of general formula (5) with alkyl magnesium halide with constant stirring at an ambient temperature in an anhydrous ethereal solvent to produce corresponding phenyl ethanol of general formula (4),




4

Ar-CHO

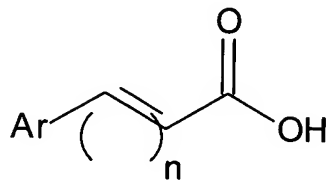
5

(b) treating the compound of general formula (4) with dimethyl formamide and phosphorous oxychloride at 0° to 10°C for 20-40 hours, working up the reaction mixture by adjusting the pH of the solution and isolating the product of general formula (3) by using conventional method,

(c) reacting the compound of general formula (3) with witting reagent in presence of a base at a temperature range of 15-80°C in an ethereal solvent for a period of 1-80 hours to get the corresponding carboxylic ester.

(d) hydrolysing the ester of step (c) with strong alkali

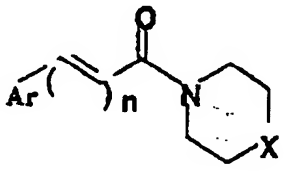
solution followed by acidification of the reaction mixture to produce the corresponding carboxylic acid of general formula (2),




2

(e) reacting compound of step (d) of general formula (2) with thionyl chloride in presence of an organic solvent at a temperature in the range of reflux temperature of 70°C-80°C, removing the solvent to obtain the corresponding acid chloride,

(f) reacting the acid chloride of step (e) with heterocyclic amine in an inert organic solvent at a temperature in the range of 0 to 50°C for 1 to 16 hours, isolating the product by purifying the reaction mixture to obtain product of formula (I).




1

8. (Withdrawn) A process as claimed in claim 7, wherein in step (a) the alkyl magnesium halide used is methyl magnesium iodide.

9. (Withdrawn) A process as claimed in claim 7, wherein in

step (a) the ethereal solvent used is selected from the group consisting of diethyl ether and tetrahydrofuran and preferably tetrahydrofuran.

10. (Withdrawn) A process as claimed in claim 7, wherein in step (b) the solution of the reaction mixture is adjusted to pH 6 to 8.

11. (Withdrawn) A process as claimed in claim 7, wherein in step (b) the product after pre adjustment is isolated by either filtration or extraction with an organic solvent selected from the group consisting of ethylacetate, chloroform, dichloromethane and dichloroethane, preferably ethylacetate.

12. (Withdrawn) A process as claimed in claim 7, wherein in step (c), the witting reagent used is prepared from the reaction of equimolar mixture of triphenyl phosphine and bromomethyl acetate or bromoethylacetate and preferably bromoethylacetate.

13. (Withdrawn) A process as claimed in claim 7, wherein in step (c) the base used is selected from a group consisting of sodium hydride, sodium methoxide and sodium ethoxide and preferably sodium hydride.

14. (Withdrawn) A process as claimed in claim 7, wherein in step (c) the ethereal solvent used is selected from a group consisting of diethylether, dimethoxyethane, tetrahydrofuran, chloroform, and dichloromethane and preferably dichloromethane.

15. (Withdrawn) A process as claimed in claim 7, wherein in step (d) the alkali used for hydrolysis is selected from a group consisting of sodium hydroxide, potassium hydroxide and calcium hydroxide and most preferably sodium hydroxide.

16. (Withdrawn) A process as claimed in claim 7, wherein in step (d) the acidification is performed using sulfuric acid or hydrochloric acid and preferably hydrochloric acid.

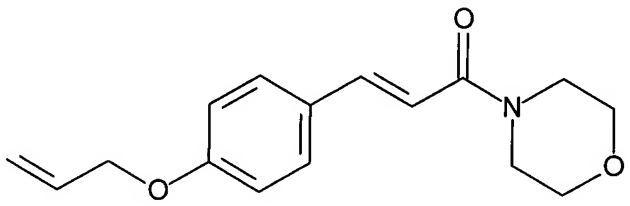
17. (Withdrawn) A process as claimed in claim 7, wherein in step (e) the organic solvent used for extraction is selected from a group consisting of dichloromethane, benzene, diethylether and toluene preferably dichloromethane.

18. (Withdrawn) A process as claimed in claim 7, wherein in step (f) the organic solvent used is selected from a group consisting of benzene, toluene, dichloromethane and ethyl acetate and preferably dichloromethane.

19. (Withdrawn) A process as claimed in claim 7, wherein in step (f) the purification of the product is carried out by employing crystallization or column chromatography technique.

20. (Canceled)

21. (New) An arylalkenoic acid heterocyclic amide compound of the formula:



**TELEPHONE INTERVIEW SUMMARY**

Applicants would like to take this opportunity to thank the Examiner for the courtesy extended during the brief telephone interview held on October 12, 2004. In accordance with the discussions held during the interview, Applicants have amended the claims in the expectation that the amendments will overcome the rejections under 35 U.S.C. §112.

During the interview, the inventive subject matter was reviewed in depth, as well as the distinguishing features of the claimed subject matter over the prior art of record. Applicants appreciate the Examiner's further explanation for the rejection under 35 U.S.C. §103. No agreement was reached during the telephone interview which would place the remaining claims in condition for allowance over this rejection.